

Abstract

Frequency division multiplex transmitter and method for eliminating crosstalk

The present invention provides a technique for eliminating crosstalk in a transmitter which is operated in a frequency-division-multiplex full duplex mode. The technique is suitable in particular for what is referred to as software-defined telecommunications equipment. The frequency division multiplex transmitter of the invention has a baseband block (18), a first transmit path (S1) and a receive path (E1) which respectively transmit and receive on different frequencies (full duplex mode). Furthermore, an auxiliary transmit path (S2) is provided which is connected to the receive path (E1) and which adds to the receive signal (E1) a signal whose phase is shifted by 180° with respect to the phase of the transmit signal. The auxiliary transmit path (S2) is driven here, independently of the first transmit path (S1), by the baseband block (18) so as to minimize the crosstalk sensed by the baseband block (18).

Figure